

ABSTRACT

An ion wind generator (20) is arranged on one side of a light source (1). The ion wind generator (20) produces an air current by negatively ionizing air by corona discharges at a needle electrode (21), or negative side, and drawing the negatively-ionized air at a cylindrical electrode (22), or positive side. The air current blows toward the light source (1) and removes heat generated by the light source (1). An ultraviolet ray from the light source (1) is introduced to a vent of the ion wind generator (20) by a first dichroic mirror (4) and a ultraviolet ray reflection mirror (17). Though air exhausted from the vent includes ozone (O_3) produced by corona discharges, the ozone is decomposed by the ultraviolet ray.